



## **Environmental Epidemiology and Toxicology Occupational Health and Injury Surveillance and Adult Blood Lead Epidemiology and Surveillance - Fact Sheet**

This activity is 100% federally funded by Centers for Disease Control and Prevention/National Institute of Occupational Safety and Health (no state match required). The activity affects the health of the approximate 2 million workers in Louisiana's workforce. Reducing staff or funding of this activity would result in a decrease in the number of work-related injuries and illnesses investigated; a decrease in the number of high risk worksites targeted for intervention; and a decrease in the number of employees monitored for work-related injuries and illnesses. An increase in funding for this activity would result in expanding the coverage of the program, and increasing the number of investigations and outreach and prevention activities.

### **Objective**

Reduce injuries and fatalities among Louisiana workers by:

- Collecting, analyzing, and interpreting health data from multiple data sources to identify workers at high risk of injury, disease, or death.
- Using data to develop evidence-based prevention strategies and interventions.
- Collaborating with stakeholders to obtain input, identify emerging or emergent occupational health issues and disseminate findings.

### **Performance Indicators**

1. Percentage of health outcome data sources for occupational injuries and illnesses reporting to the Program
2. Number of occupational illness and injuries reported
3. Number of adult blood lead cases investigated
4. Number of outreach and prevention activities implemented

### **Narrative**

The Occupational Health and Injury Surveillance (OHIS) Program is dedicated to improving the health of Louisiana's workforce. The foundation of this activity rests on a comprehensive and integrated approach to the collection and analysis of occupational illness and injury data. This involves routinely obtaining, evaluating, and analyzing health outcome data from various data

sources including death certificates, hospital discharge data, cancer registry data, workers' compensation records, and emergency room records. In addition, the OHIS Program conducts real-time surveillance of laboratory reports and Poison Control Center calls for several mandated reportable conditions including adult lead poisoning, mercury poisoning, pesticide poisoning and carbon monoxide exposure. Case-based investigations of these conditions identify unsafe work activities and practices.

Using validated methodologies, data from multiple sources are routinely evaluated to identify specific cases of illness, injury or hazardous exposure that require a public health response; identify illness and injury patterns that suggest problem areas; and monitor trends over time. OHIS partners with other organizations and agencies to implement outreach and prevention activities. Partners include occupational health professionals with expertise in various disciplines such as occupational medicine, toxicology, industrial hygiene, and health education.

The complexity of worker health and safety issues necessitates an array of outreach and prevention strategies. These include: enforcement of applicable laws and regulations; employer, worker and health care provider education; technical consultation on design of health and safety programs; hazard reduction activities such as ventilation design and ergonomics; and research to evaluate impacts of interventions.

Examples of successful interventions include partnering with Tulane University to provide educational training to the medical community on complex environmental and occupational issues like heavy metal and pesticide poisoning, and partnering with regulatory agencies such as the Occupational Safety and Health Administration (OSHA) and the Department of Agriculture and Forestry (LDAF) to target worksites for enforcement of health and safety regulations. The Program also provides consultative assistance to employees, employers, and healthcare providers who have questions or concerns about a work-related issue.

## **Better Health**

The OHIS Program supports the Better Health State Outcome Goal by promoting a safe work environment and preventing work-related injuries and illnesses. The Program affects the approximate 2 million workers in Louisiana's workforce. Current funding for OHIS comes from 2 federal grants: State-based Occupational Safety and Health Surveillance and Adult Blood Epidemiology and Surveillance (no state match required). A healthy, informed workforce will reduce hospital visits from on-the-job injuries. Identifying high risk occupations and industries will allow for targeted outreach and prevention activities that will reduce the occurrence of injuries, diseases, and hazardous exposures. Education of workers and employers about occupational safety issues will improve their ability to protect themselves and co-workers and promote a safer work environment.

- Economic Development:
  - The OHIS program creates an attractive economic environment for employees and employers:

- A healthy workforce reduces Workers' Compensation and other injury and illness costs to employers
- Assessing high-risk occupations and industries creates a healthy and productive work environment for employees
- Creating a strong network of occupational health partners encourages innovative and timely responses to work issues
- Hurricane Protection and Emergency Preparedness:
  - The OHIS monitors the health and safety of emergency responders during an emergency event.
  - OHIS has established a real-time alert notification system with the Louisiana Poison Control Center to identify potential chemical public health threats.

Catalog of Federal Domestic Assistance 93.957 - State-based Occupational Safety and Health Surveillance

CDC Contract # 211-2009-M-21220 – Adult Blood Lead Epidemiology and Surveillance

RS 40:4(A)(2), RS 40:5(10), and RS 36:258

Each year, millions of the estimated 140 million US workers are injured on the job or become ill from exposure to hazards at work. These work-related injuries and illnesses result in substantial human and economic costs for workers, employers, and society. Workers' compensation insurance claims cost approximately \$55 billion

([www.nasi.org/usr\\_doc/NASI\\_Workers\\_Comp\\_Report.pdf](http://www.nasi.org/usr_doc/NASI_Workers_Comp_Report.pdf)). In Louisiana, there is approximately one on-the-job fatal injury every 2.5 days, and Louisiana's fatal occupational injury rate is consistently above the US rate ([www.dhh.louisiana.gov/offices/publications/pubs-205/Death\\_at\\_Work.pdf](http://www.dhh.louisiana.gov/offices/publications/pubs-205/Death_at_Work.pdf)). Louisiana also has elevated rates for occupational respiratory diseases such as asbestosis and mesothelioma

([www.dhh.louisiana.gov/offices/publications/pubs-205/Final\\_Occ\\_Indicator\\_Report.pdf](http://www.dhh.louisiana.gov/offices/publications/pubs-205/Final_Occ_Indicator_Report.pdf)). Hospitalization for respiratory conditions paid by workers' comp was the most costly diagnosis of all work-related hospitalizations in Louisiana. Adult lead poisoning is also emerging as a problem, particularly among construction workers

([www.dhh.louisiana.gov/offices/publications/pubs-205/LMR\\_julyaug08\\_adultpbarticle.pdf](http://www.dhh.louisiana.gov/offices/publications/pubs-205/LMR_julyaug08_adultpbarticle.pdf)).

A large amount of surveillance data is routinely processed by OHIS. The following table presents number of records received by data source for 2005 through 2007.

Data source	Number of records by OHIS		
	2005	2006	2007
<b>Hospital Discharge</b>	564,852	549,186	515,540
<b>Mortality</b>	45,143	39,688	40,429

<b>Tumor Registry</b>	22,443	22,942	Data not yet available
<b>Laboratory Data</b>	Data not available prior to 2007; Rule change was in July 2006.		11,000
<b>Poison Control Center</b>	500	551	588
<b>Office of Workers' Comp</b>	220	203	140
<b>Bureau of Labor Statistics/Census of Fatal Occupational Injuries</b>	111	118	139
<b>Bureau of Labor Statistics /Survey of Occupational Illness &amp; Injuries</b>	40,300	38,000	41,000
<b>Health-Related Pesticide Incident Complaints</b>	22	69	25

The Federal Occupational Safety and Health Administration (OSHA) enforces workplace health and safety standards, however, this is only one component of creating a healthy workforce. The Centers for Disease Control and Prevention/National Institute of Occupational Safety and Health (NIOSH), Council of State and Territorial Epidemiologists (CSTE), National Research Council (NRC), and Institute of Medicine all recognize the key role of state health departments in preventing occupational diseases, injuries, and fatalities. Health departments are uniquely positioned to collect health data (e.g., deaths, hospitalizations, injuries, lead poisoning) needed to determine the magnitude of the problem of work-related injuries and illnesses, identify workers at greatest risk, and establish prevention priorities.

Guidelines developed by CSTE and NIOSH for health departments to establish occupational disease and injury prevention programs have been adopted by OHIS. These guidelines correspond to the three core public health functions identified in the NRC report *The Future of Public Health*: assessment, policy development, and assurance. The guidelines have all been tested by at least one state-based occupational health program. Assessment requires health department capacity to identify specific cases of illness, injury, or hazardous exposure that require a public health response; identify illness and injury patterns that suggest problem areas; monitor trends over time; and evaluate effectiveness of interventions. Policy development requires institutionalizing communications within public health and other governmental agencies, and among businesses and industry groups. Assurance occurs through targeted outreach and prevention activities developed to prevent work-related injuries and illnesses and promote a healthier workforce.